We claim:

1. A method of diagnosing kidney cancer in a mammalian patient comprising the steps of:

taking a sample of body fluid or tissue from the patient;

detecting the amount of CD70 that is present in the patient sample; and

comparing the amount of CD70 in the patient sample as against the amount of CD70 in a suitable, normal mammalian body fluid or tissue sample acting as a control,

wherein an elevated amount of CD70 in the patient sample compared to the control suggests that the patient has kidney cancer.

2. The method of claim 1, wherein the mammalian patient is a human patient, the kidney cancer is renal cell carcinoma or clear cell renal cell carcinoma, and the patient sample is selected from the group consisting of a blood sample and a kidney tissue sample.

3. A method of diagnosing kidney cancer in a mammalian patient comprising the steps of:

taking a sample of body fluid or tissue from the patient;

detecting the amount of CD203c that is present in the patient sample; and

comparing the amount of CD203c in the patient sample as against the amount of CD203c in a suitable, normal mammalian body fluid or tissue sample acting as a control,

wherein an elevated amount of CD203c in the patient sample compared to the control suggests that the patient has kidney cancer.

4. The method of claim 3, wherein the mammalian patient is a human patient, the kidney cancer is renal cell carcinoma or clear cell renal cell carcinoma,

and the patient sample is selected from the group consisting of a blood sample and a kidney tissue sample.

5. An assay to detect the presence of renal cell carcinoma cells or clear cell renal cell carcinoma cells in a human patient comprising the steps of:

taking a kidney tissue sample or a blood sample from the patient;

detecting the amounts of CD70 and CD203c that are present in the patient sample; and

comparing the amounts of CD70 and CD203c in the patient sample as against the amounts of CD70 and CD203c found in a suitable normal kidney tissue sample or blood sample acting as a control,

wherein amounts of at least one of CD70 and CD203c in the patient sample that are higher than normal, as compared to the control, suggest that the patient is suffering from renal cell carcinoma or clear cell renal cell carcinoma.

6. A pharmaceutical composition comprising:

a hybrid molecular structure, itself comprising a molecule that specifically targets CD70 linked to a cellular killing agent; and

a pharmaceutically acceptable carrier,

wherein the composition destroys malignant kidney tissue.

7. The pharmaceutical composition of claim 6, wherein the malignant kidney tissue is renal cell carcinoma tissue or clear cell renal cell carcinoma tissue.

8. The pharmaceutical composition of claim 6, wherein the cellular killing agent is a calicheamicin or a calicheamicin derivative.

9. The pharmaceutical composition of claim 6, wherein the molecule that specifically targets CD70 is CD27 or Ki-24.

10. A pharmaceutical composition comprising:

a hybrid molecular structure itself comprising a molecule that specifically targets CD203c linked to a cellular killing agent; and

a pharmaceutically acceptable carrier,

wherein the composition destroys malignant kidney tissue.

11. The pharmaceutical composition of claim 10, wherein the malignant kidney tissue is renal cell carcinoma tissue or clear cell renal cell carcinoma tissue.

12. The pharmaceutical composition of claim 10, wherein the cellular killing agent is a calicheamicin or a calicheamicin derivative.

13. The pharmaceutical composition of claim 10, wherein the molecule that specifically targets CD203c is 97A6.

14. A method of treating a human patient that has or is at risk of developing renal cell carcinoma or clear cell renal cell carcinoma using a targeted drug delivery approach comprising:

preparing an immunoconjugate comprising a cellular killing agent linked to a monoclonal antibody directed against CD70 or CD203c; and

administering the immunoconjugate to the patient in a pharmaceutically effective dose.

15. The method of claim 14, wherein the cellular killing agent is a cytotoxic agent or a radioactive agent.

16. The method of claim 14, wherein the cellular killing agent is selected from the group consisting of a calicheamicin and a calicheamicin derivative, and the monoclonal antibody is Ki-24 or 97A6.

17. A method of inhibiting the growth of a renal cell carcinoma tumor or a clear cell renal cell carcinoma tumor comprising:

preparing a hybrid molecular structure, itself comprising a cellular killing agent linked to a molecule that specifically targets at least one of CD70 and CD203c; and

delivering to the tumor a pharmaceutically effective amount of the hybrid molecular structure.

18. The method of claim 17, wherein the cellular killing agent is a cytotoxic agent or a radioactive agent.

19. The method of claim 17, wherein the cellular killing agent is a calicheamicin or a calicheamicin derivative, and the molecule that specifically targets at least one of CD70 and CD203c is Ki-24, CD27 or 97A6.

20. A method of treating a human patient that has or is at risk of developing renal cell carcinoma or clear cell renal cell carcinoma comprising:

administering directly or indirectly to the patient's kidneys a pharmaceutically effective dose of a preparation selected from the group consisting of:

an antibody to at least one of CD70 and CD203c that is capable of inducing cell death;

an antibody to at least one of CD70 and CD203c that is linked to a cellular killing agent;

a peptide fragment that exhibits affinity for at least one of CD70 and CD203c and that is capable of inducing cell death; or

a synthetic composition that exhibits affinity for at least one of CD70 and CD203c and that is capable of inducing cell death.

21. A method of reducing or stopping the growth of malignant kidney tissue in a mammalian patient comprising:

reducing the levels of at least one of CD70 and CD 203c in the patient.

22. The method of claim 21, wherein the levels of CD70 or CD203c in the patient are reduced by reducing the amounts of soluble CD70 or CD203c in the patient's circulating blood.

23. The method of claim 21, wherein the levels of CD70 or CD203c are reduced by reducing CD70 or CD203c gene expression using an RNA interference strategy that comprises the step of exogenously delivering to the cells in the malignant kidney tissue or endogenously expressing in the cells of the malignant kidney tissue an effective amount of at least one siRNA, each such siRNA being selected from the group consisting of siRNAs as shown in Table 3 and Table 4, wherein each such siRNA comprises a sense strand (5'→3') together with its complementary siRNA antisense strand (3'→5').

24. The method of claim 23, wherein the malignant kidney tissue is renal cell carcinoma tissue or clear cell renal cell carcinoma tissue.

25. The method of claim 21, wherein the levels of CD70 or CD203c in the patient are reduced by administering an RNAi molecule.